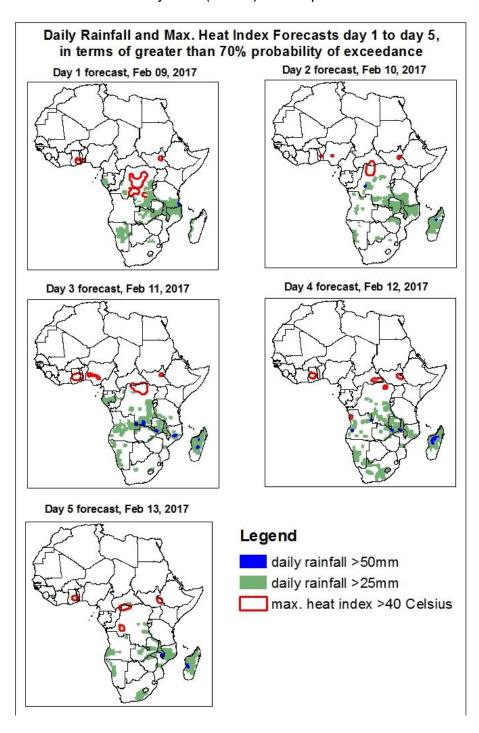
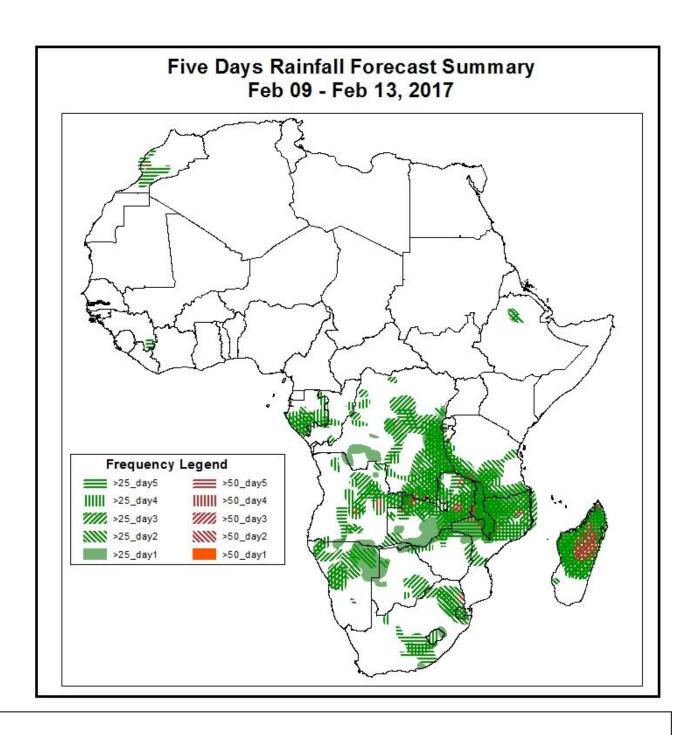
## 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Feb 08, 2017)

# 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Feb 09– Feb 13, 2017)

The forecasts are expressed in terms of high probability of precipitation (POP) and high probability of maximum heat index, based on the NCEP/GFS, ECMWF and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



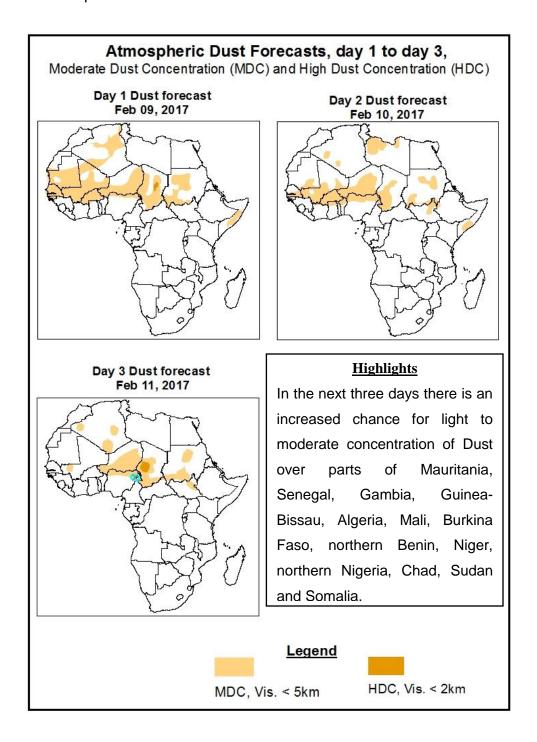


# <u>Highlights</u>

In the next five days, lower level wind convergences across the Central and South African countries are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of light to moderate rainfall over portions of Zambia, Malawi and Madagascar, local areas of Ethiopia, Gabon, DRC, Tanzania, Angola, Mozambique, Namibia, Botswana, Zimbabwe, South Africa and Swaziland.

# 1.2. Atmospheric Dust Concentration Forecasts (valid: Feb 09 – Feb 11, 2017) The forecasts are expressed in terms of high probability of dust concentration, based on

the Navy Aerosol Analysis and Prediction System, NCEP/GFS lower-level wind forecasts and expert assessment.



#### **1.3. Model Discussion,** Valid: Feb 09 – Feb 13, 2017

The Azores High Pressure system over the North Atlantic Ocean is expected to weaken with its value of the central pressure decreasing from 1036hPa to 1022hPa in the next 96 hours and intensify to 1024hPa during the remaining forecast period.

The St. Helena High Pressure system over the Southeast of the Atlantic Ocean is expected to intensify with its value of the central pressure increasing from 1025hPa to 1033hPa during the forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to intensify with its value of the central pressure increasing from 1032hPa to 1035hPa in the next 72 hours and weaken to 1029hPa during the remaining forecast period.

At 925hPa, strong dry Northerly to Easterly winds may lead from light to moderate dust concentration over parts of Mauritania, Senegal, Gambia, Guinea-Bissau, Algeria, Mali, Burkina Faso, northern Benin, Niger, northern Nigeria, Chad, Sudan, Somalia and Libya.

At 850hPa level, lower level wind convergences are expected to prevail over Cameroon, Congo, CAR, DRC, Angola, Zambia, South Africa and Comoro Island.

In the next five days, lower level wind convergences across the Central and South African countries are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of light to moderate rainfall over portions of Zambia, Malawi and Madagascar, local areas of Ethiopia, Gabon, DRC, Tanzania, Angola, Mozambique, Namibia, Botswana, Zimbabwe, South Africa and Swaziland.

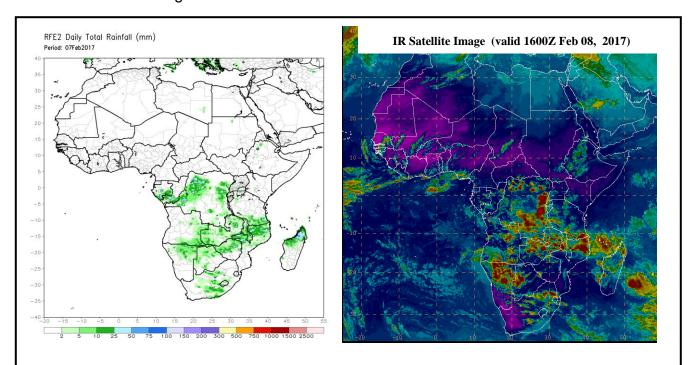
# 2.0. Previous and Current Day Weather over Africa

# 2.1. Weather assessment for the previous day (Feb 07, 2017)

Light to moderate rainfall was observed over portions of Ethiopia, Gabon, Congo, DRC, Tanzania, Angola, Zambia, Mozambique, Namibia, Zimbabwe, South Africa and Madagascar.

## **2.2.** Weather assessment for the current day (Feb 08, 2017)

Intense convective clouds are observed over portions of Gabon, Congo, DRC, Tanzania, Angola, Zambia, Malawi, Mozambique, Namibia, Botswana, Zimbabwe, South Africa, Swaziland and Madagascar.



Previous day rainfall condition over Africa (Left) based on the NCEP CPCE/RFE and current day cloud cover (right) based on IR Satellite image.

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